Subject: Memory Issue size
Posted by jbond007 on Mon, 13 Feb 2006 04:50:19 GMT
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hi all i found i security issue
the command free inside of vps show all memory from server
plase OpenVZ devel find diferent way to work in MB not, sample
to add memory size is Hard
--vmguarpages=\"64288:2147483647\" --save
how can setup memory easy way MB
how i check vzmemcheck in MB only
Help me Thank you
Max
OpenVZ Addiction

Subject: Re: Memory Issue size
Posted by dev on Mon, 13 Feb 2006 07:29:14 GMT
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1. free output will be virtualized soon. But there are no security implications of this.
http://bugzilla.openvz.org/show_bug.cgi?id=102

2. your feature request for setting params in MBs added to bugzilla. But in configs I suppose it will be still written in old pages/bytes values for backward compatibility.
http://bugzilla.openvz.org/show_bug.cgi?id=101

Subject: Re: Memory Issue size
Posted by devnu11 on Mon, 13 Feb 2006 23:07:52 GMT
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This would certainly make things less complicating/confusing. I hope progress is made on this as it would be a welcomed feature.

Subject: Re: Memory Issue size
Posted by barmaley on Sun, 19 Feb 2006 05:53:48 GMT
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--vmguarpages $((512*256)):$((1024*256)) is going to
send the barrier to 512MB and the limit to 1024MB

Subject: Re: Memory Issue size
Posted by disaster on Sun, 19 Feb 2006 09:31:10 GMT

sorry but it does not work - for me.

I tried to set the limit and the barrier to 128MB.

```
root:~# vzctl set 4 --privvmpages 32768:32768 --oomguarpages 32768:32768 --physpages
32768:32768 --vmguarpages 32768:32768 --save
Saved parameters for VPS 4
root:~# vzctl start 4
Starting VPS ...
VPS is mounted
Adding IP address(es): 192.168.0.13
Setting CPU units: 1000
Set hostname: myhostname
File resolv.conf was modified
Setting quota ugidlimit: 99999999
VPS start in progress...
root:~# ssh 192.168.0.13
Password:
Last login: Sun Feb 19 09:26:03 2006 from 192.168.0.10
myhostname:~# perl -e '$a="a";for(;;) {$a.=$a; print "allocated
".int(length($a)/1024/1024)."MB\n";}'
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
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allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 0MB
allocated 1MB
allocated 2MB
allocated 4MB
allocated 8MB
allocated 16MB
allocated 32MB
```

allocated 64MB
allocated 128MB
allocated 256MB
allocated 512MB
allocated 1024MB
Out of memory!

I don't understand that...

Stefan

Subject: Re: Memory Issue size
Posted by disaster on Sun, 19 Feb 2006 09:44:53 GMT
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OK - i found some strange things...

1. as you can see, i can still allocate 1GB
2. a cat cat /proc/user_beancounters shows me failures at privvmpages failcnt=4 - but the script can work
3. on the host machine i see in syslog:

Uncharging too much 1 h 0, res unused_privvmpages ub 4
Uncharging too much 1 h 0, res unused_privvmpages ub 4
Uncharging too much 1 h 0, res unused_privvmpages ub 4
Uncharging too much 1 h 0, res unused_privvmpages ub 4
Uncharging too much 1 h 0, res unused_privvmpages ub 4
Uncharging too much 1 h 0, res unused_privvmpages ub 4
Uncharging too much 1 h 0, res unused_privvmpages ub 4
Uncharging too much 1 h 0, res unused_privvmpages ub 4
Uncharging too much 1 h 0, res unused_privvmpages ub 4
Fatal resource shortage: kmemsize, UB 4.
Uncharging too much 65610 h 54827, res unused_privvmpages ub 4
Uncharging too much 3 h 0, res unused_privvmpages ub 4

What does that mean?

4. if i set kmemsize to 655360 the script can only allocate 128MB - any idea?

Subject: Re: Memory Issue size

Posted by dev on Sun, 19 Feb 2006 10:03:14 GMT
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1. why have you set ugidlimit to 99999999? this is quite huge and I suppose allows DoS from your VPs.
Do you really have 99millions of users and groups in your VPS???

2. I suppose string lenght has nothing to do with real memory allocated by perl.

Why? because:
- perl allocates lot's of memory on his own.
- AFAIK it uses garbarge collection

You can check it with RSS memory which is shown by top and ps.
Also, as barmaley pointed to you, all these parameters limit address space. Which is usually bigger than a set of allocated pages by application. So, for example, if perl mmap()'s some big file in it's address space it consumes privvmpages.

Subject: Re: Memory Issue size
Posted by disaster on Sun, 19 Feb 2006 10:14:10 GMT
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I've not checked parameters like guid and so on - it is only a test machine and does not matter.

Ähm the length of the string is def. allocated - i've also checked it by top - i can see, that perl does allocate 45% of RAM (next time top refresh the process is mostly killed cause of out of memory and the fact that the sting is always doubled).

But i think we'll discuss that in my own thread here:
http://forum.openvz.org/index.php?t=msg&goto=1666
sorry for my cross posting.

Subject: Re: Memory Issue size
Posted by dev on Sun, 19 Feb 2006 10:31:00 GMT
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disaster,

what VPS OS do you use?
I will recheck it tomorrow with the script you supplied for a string, but it looks quite correct.

Perl maps too much of an address space. This is normal.

Please, note, privvmpages and vmguarpages are not a real amount of _physical_ memory. This is

size of an allocated _address_ _space_, which can _potentially_ allocate the pages. This is why, usual applications can report less RAM available, because address space is used for glibc/elfs/files etc.

Subject: Re: Memory Issue size
Posted by disaster on Sun, 19 Feb 2006 11:20:41 GMT
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You have read my last posting at?:
http://forum.openvz.org/index.php?t=msg&th=293

> what VPS OS do you use?

Both the Sstem and the VPS OS are Debian 3.1. (I'll try it with another image in a few hours)

Quote:Please, note, privvmpages and vmguarpages are not a real amount of _physical_ memory. This is size of an allocated _address_ _space_, which can _potentially_ allocate the pages. This is why, usual applications can report less RAM available, because address space is used for glibc/elfs/files etc.

I know that. But this should result in a stop of a script earlier and not later.

I can eat up all mem with a simple perl script - and the mem is really eaten up as you can see in top - no other process can use the ram and the system start swapping...

Kernel is a 2.6.0 self build with the latest patch and the patch from the bugzilla for irq.c.

That could not be right...

Thanks for your help.

Subject: Re: Memory Issue size
Posted by disaster on Sun, 19 Feb 2006 12:36:04 GMT
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OK - you have posted in this thread so i do it too

I've done some more testing. If i allocate within a c script - everthing works fine - i cannot allocate more than 115MB the rest will be the system. vzmemcheck alos reports that.

If i run the perl script AND vzmemcheck it looks like this:

VPSID LowMem LowMem RAM MemSwap MemSwap Alloc Alloc Alloc
util commit util util commit util commit limit

4 0.76 13.95 359.34 359.34 141.95 361.83 141.95 141.95

You see allocation is more than limit and more than commit...

There must be a bug.

Stefan

Subject: Re: Memory Issue size
Posted by disaster on Sun, 19 Feb 2006 13:03:24 GMT
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I've now tested Kernel 2.6.15 with the beta Patch - there it WORKS!!! I'm not able to allocate more that 115MB with perl - but the fairscheduler does not work

So i think we must wait for fairscheduler 2.6.15 or for a patch for 2.6.8 ...

Stefan
